



Great Horned Owl © Estate of Roger Tony Peterson

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President or Manager
Powell Mountain Energy, LLC
1762 Bonny Blue Rd.
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EXECUTIVE SUMMARY

2015 FEB 10 PM 1:40

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By Certified Mail Return Receipt Requested

Re: 60-Day Notice of Intent to File Citizens' Suit Under Clean Water Act Section 505(a)(1) for Violations of Section 301 of the Act.

The Sierra Club, Appalachian Voices, and Southern Appalachian Mountain Stewards (collectively “the Groups”), in accordance with section 505 of the Clean Water Act (the “Act” or the “CWA”), 33 U.S.C. § 1365, 40 C.F.R. Part 135, hereby notify you that Powell Mountain Energy, LLC (“Powell Mountain”) has violated and continues to violate “an effluent standard or limitation” under Sections 301(a) and 505(a)(1)(A) of the CWA, 33 U.S.C §§ 1311(a), 1365(a)(1)(A). Powell Mountain committed the violations by discharging the pollutant Total Dissolved Solids (TDS) from the Mayflower Complex in Lee County, Virginia in excess of the Waste Load Allocations (WLAs) issued pursuant to the Total Maximum Daily Load (TMDL) developed for the Straight Creek watershed. Powell Mountain’s discharges of TDS are governed by Virginia joint Coal Surface Mining Operation (“CSMO”)/National Pollutant Discharge Elimination System (“NPDES”) Permit 1402024/0082024, which makes the WLAs enforceable permit conditions. Each exceedance of a WLA for the Straight Creek watershed is therefore a violation of Powell Mountain’s associated CSMO/NPDES permit and is actionable under Section 505(a)(1)(A) of the CWA. A violation of an annual WLA constitutes a permit violation by Powell Mountain on every day of that year. See e.g., Chesapeake Bay Found., Inc. v. Gwaltney of Smithfield, Ltd. 791 F.2d 304 313-315 (4th Cir. 1986), vac’d on other grounds, 484 U.S. 49 (1987).

If within sixty days of the postmark of this letter Powell Mountain does not bring its discharges into full compliance with the terms of its CSMO/NPDES permit, we intend to file a citizen suit seeking civil penalties for Powell Mountain's ongoing violation and an injunction compelling Powell Mountain to comply with the Act.

I. Straight Creek TMDL

On June 8, 2006, the U.S. Environmental Protection Agency approved Virginia's TMDL for Straight Creek and its tributaries in accordance with CWA Section 303(d), 33 U.S.C. § 1313(d), and 40 C.F.R. § 130.7. The TMDL was required by the CWA because Straight Creek

and its tributaries, including Bailey's Trace and Gin Creek, are impaired, *i.e.*, do not adequately support the aquatic life use (general standard – benthic), as determined by failing scores on the Virginia Stream Condition Index (VASCI). Maptech, Inc. *Fecal Bacteria and General Standard Total Maximum Daily Load Development for Straight Creek* (March 29, 2006). TDS was identified as one of the primary stressors causing the impairment. *Id.* at 7-43; Maptech Inc., *General Standard (Benthic) Total Maximum Daily Load Development for the Powell River Tributaries (Straight Creek Tributaries, Virginia, including Ely Creek, Stone Creek, Puckett Creek, Lick Branch, Bailey's Trace, and Gin Creek)* (October 26, 2009) at 7-36.

The TMDL addresses Straight Creek and its tributaries' aquatic impairment by setting numeric load allocations (LAs) for non-point source discharges and wasteload allocations (WLAs) for point source discharges of TDS. WLAs are derived from the total available pollutant load in a watershed and prescribe the maximum amount of a pollutant that a point source or group of point sources can discharge over a given period of time consistent with the TMDL. WLAs "constitute a type of water quality-based effluent limitation." 40 C.F.R. § 130.2. The Straight Creek TMDL assigns a "transient" load for TDS that applies to "all permitted sources" of TDS in the watershed. This "transient" load is a cumulative load shared among outfalls with sediment control structures that will eventually be removed upon reclamation of the facility. The TMDL sets the transient load for all sources at 1.80E+5 kg/year, or 180,000 kg/year.

Although this transient load is a combined load for all transient structures in the watershed, Powell Mountain exceeded this limit *by itself* as a result of discharges from outfalls on Permit 1402024/0082024 in each of the last five one-year periods for which monitoring information is available. The following chart shows the total loads discharged from all outfalls on Permit 1402024/0082024 for each of those periods, which run from the fourth quarter of one year through the third quarter of the following year, *i.e.*, from October through the following September.¹

| Period | Annual Load from 1402024 alone (kg) | Total Annual Watershed Load Allocation (kg) |
|-----------------|-------------------------------------|---|
| 4Q2013 - 3Q2014 | 312,216.8151 | 180,000 |
| 4Q2012 - 3Q2013 | 273,579.6614 | 180,000 |
| 4Q2011 - 3Q2012 | 468,594.0902 | 180,000 |
| 4Q2010 - 3Q2011 | 474,395.898 | 180,000 |
| 4Q2009 - 3Q2010 | 745,436.2968 | 180,000 |

II. WLAs Are Enforceable Pursuant to Powell Mountain's Joint CSMO/NPDES Permit

The Clean Water Act requires that all NPDES permits be "consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared

¹ See attached Exhibit A for charts showing individual calculations for all outfalls on Permit 1402024/0082024.

by the State and approved by EPA pursuant to 40 C.F.R. 130.7.” 40 C.F.R. § 122.44(d)(1)(vii)(B). Thus, NPDES permits covering discharges subject to a WLA must include conditions that will ensure compliance with the WLAs.

In Virginia, the Division of Mined Land Reclamation (“DMLR”) in the Department of Mines, Minerals, and Energy (“DMME”) makes WLAs directly enforceable permit conditions of its joint CSMO/NPDES permits for dischargers subject to a TMDL. In fact, the DMLR has a standard “NPDES Permit Conditions” document, modified on January 3, 2003. *See* Exhibit B, attached. This standard permit conditions document contains a condition which mandates that “the discharge of any pollutant(s) from this facility that enters into a water body with an existing and approved Total Maximum Daily Load (TMDL) must be made in compliance with the TMDL and any applicable TMDL implementation plan.” The NPDES Permit Conditions document is a part of permit 1402024/0082024.

A permittee’s compliance with its WLA can be determined by multiplying the concentration of the subject pollutant in the permittee’s effluent by rate of flow from its outfalls and the amount of time represented by the sample. The amounts represented by each sample are then added together to determine the amount of the pollutant discharged. The concentration and flow data come from the permittee’s Discharge Monitoring Reports (DMRs). This procedure is described in more detail in newer NPDES permits. *See, e.g.,* attached Exhibit C. All calculations performed to support this notice are included in the attached Exhibit A.

As a result of the discharges listed in Section I, above, Powell Mountain is in violation of effluent limitations in its Joint CSMO/NPDES Permit 1402024/0082024. Discharges authorized under the permit violated the annual TDS load in the last five annual periods for which discharge monitoring reports are available through the Virginia DMME. Each of these violations is a violation of Powell Mountain’s permit as well as the Act.

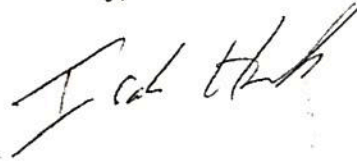
III. Conclusion

As described above, Powell Mountain has discharged pollutants in violation of load allocations for TDS in each of the past five one-year periods. Those discharges violate the terms of its permits and Section 301(a) of the CWA, 33 U.S.C. § 1311(a). In the absence of evidence of remedial steps taken to eliminate the violations described above, we assume that they are ongoing. If Powell Mountain does not cease these violations we intend to bring a citizen suit against it under Section 505(a)(1) of the Clean Water Act, 33 U.S.C. § 1365(a)(1), seeking civil penalties and injunctive relief to enforce the Act. The Groups hereby give notice of their intention to sue for ongoing violations of the same type that occur after the violations outlined in the notice letter. *See Public Interest Research Group of N.J., Inc. v. Hercules, Inc.* 50 F.3d 1239 (3d Cir. 1995).

We encourage Powell Mountain to contact us if it believes anything in this letter is inaccurate or if it has taken any remedial action to abate the violations described above. If Powell Mountain does not advise us of any remedial steps during the 60-day period, we will assume that no such steps have been taken and that violations are likely to continue. We would

be happy to meet with Powell Mountain, or its representative, to attempt to resolve these claims within the 60-day notice period.

Sincerely,



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cc:

Via Certified Mail

David K. Paylor, Director
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P.O. Box 1105
Richmond, VA 23218

Randy Casey, Director
Division of Mined Land Reclamation
Virginia DMME

P. O. Drawer 900
Big Stone Gap, VA 24219

Regional Administrator Shawn M. Garvin
U.S. Environmental Protection Agency Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Administrator Gina McCarthy
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

CT Corporation System
4701 Cox Rd., Suite 285
Glen Allen, VA 23060

| Annual TDS Load (kg) for Powell Mountain Energy, LLC Permit 1402024/0082024 | | | | | | | |
|---|------------|-------------|-------------|-------------|-------------|-------------|--|
| | MPID | | | | | | |
| Loading Period | 00000059 | 1070262 | 1085587 | 1085591 | 1085592 | Total | |
| 4Q2013 - 3Q2014 | 2574.57455 | 761.11975 | 204733.7463 | 104147.3745 | 0 | 312216.8151 | |
| 4Q2012 - 3Q2013 | 5256.3506 | 1538.45325 | 141306.9188 | 125079.3258 | 398.613 | 273579.6614 | |
| 4Q2011 - 3Q2012 | 11158.3845 | 17545.93165 | 309459.0115 | 118277.535 | 12153.2275 | 468594.0902 | |
| 4Q2010 - 3Q2011 | 17770.7823 | 60383.5802 | 195054.8188 | 193325.5986 | 7861.11815 | 474395.898 | |
| 4Q2009 - 3Q2010 | 3948.3615 | 53432.454 | 582632.4135 | 76952.93289 | 28470.13488 | 745436.2968 | |

| MPID | Date Sampled | Flow (GPM) | TDS (mg/L) | Days Represented | Conversion Factor | Period Load (kg) | Annual Load (kg) |
|---------|--------------|------------|------------|------------------|-------------------|------------------|------------------|
| 0000059 | 8/22/2014 | 10 | 312 | 15.5 | 0.00545 | 263.562 | 4Q2013 - 3Q2014 |
| 0000059 | 7/22/2014 | 5 | 246 | 15.5 | 0.00545 | 103.90425 | 2574.57455 |
| 0000059 | 6/12/2014 | 5 | 382 | 15 | 0.00545 | 156.1425 | |
| 0000059 | 5/20/2014 | 3 | 326 | 15.5 | 0.00545 | 82.61655 | |
| 0000059 | 3/20/2014 | 5 | 318 | 15.5 | 0.00545 | 134.31525 | |
| 0000059 | 3/11/2014 | 5 | 296 | 15.5 | 0.00545 | 125.023 | |
| 0000059 | 1/20/2014 | 10 | 240 | 15.5 | 0.00545 | 202.74 | |
| 0000059 | 1/9/2014 | 20 | 286 | 15.5 | 0.00545 | 483.197 | |
| 0000059 | 12/13/2013 | 25 | 266 | 15.5 | 0.00545 | 561.75875 | |
| 0000059 | 12/3/2013 | 5 | 438 | 15.5 | 0.00545 | 185.00025 | |
| 0000059 | 11/18/2013 | 10 | 338 | 15 | 0.00545 | 276.315 | |
| 0000059 | 8/20/2013 | 3 | 352 | 15.5 | 0.00545 | 89.2056 | 4Q2012 - 3Q2013 |
| 0000059 | 8/3/2013 | 3 | 306 | 15.5 | 0.00545 | 77.54805 | 5256.3506 |
| 0000059 | 7/17/2013 | 10 | 250 | 15.5 | 0.00545 | 211.1875 | |
| 0000059 | 7/10/2013 | 15 | 248 | 15.5 | 0.00545 | 314.247 | |
| 0000059 | 6/21/2013 | 10 | 274 | 15 | 0.00545 | 223.995 | |
| 0000059 | 6/14/2013 | 15 | 306 | 15 | 0.00545 | 375.2325 | |
| 0000059 | 5/15/2013 | 8 | 274 | 15.5 | 0.00545 | 185.1692 | |
| 0000059 | 5/3/2013 | 10 | 268 | 15.5 | 0.00545 | 226.393 | |
| 0000059 | 4/8/2013 | 5 | 276 | 15 | 0.00545 | 112.815 | |
| 0000059 | 4/1/2013 | 20 | 298 | 15 | 0.00545 | 487.23 | |
| 0000059 | 3/22/2013 | 5 | 284 | 15.5 | 0.00545 | 119.9545 | |
| 0000059 | 3/15/2013 | 10 | 282 | 15.5 | 0.00545 | 238.2195 | |
| 0000059 | 2/12/2013 | 5 | 292 | 14 | 0.00545 | 111.398 | |
| 0000059 | 2/5/2013 | 10 | 386 | 14 | 0.00545 | 294.518 | |
| 0000059 | 1/9/2013 | 5 | 288 | 15.5 | 0.00545 | 121.644 | |
| 0000059 | 1/2/2013 | 10 | 382 | 15.5 | 0.00545 | 322.6945 | |
| 0000059 | 12/14/2012 | 5 | 382 | 15.5 | 0.00545 | 161.34725 | |
| 0000059 | 11/14/2012 | 5 | 420 | 15 | 0.00545 | 171.675 | |
| 0000059 | 11/7/2012 | 20 | 382 | 15 | 0.00545 | 624.57 | |
| 0000059 | 10/9/2012 | 5 | 344 | 15.5 | 0.00545 | 145.297 | |
| 0000059 | 10/2/2012 | 25 | 304 | 15.5 | 0.00545 | 642.01 | |
| 0000059 | 9/14/2012 | 1 | 488 | 15 | 0.00545 | 39.894 | 4Q2011 - 3Q2012 |
| 0000059 | 9/5/2012 | 10 | 400 | 15 | 0.00545 | 327 | 11158.3845 |
| 0000059 | 8/21/2012 | 5 | 246 | 15.5 | 0.00545 | 103.90425 | |
| 0000059 | 8/9/2012 | 25 | 328 | 15.5 | 0.00545 | 692.695 | |
| 0000059 | 7/17/2012 | 10 | 300 | 15.5 | 0.00545 | 253.425 | |
| 0000059 | 7/9/2012 | 10 | 372 | 15.5 | 0.00545 | 314.247 | |
| 0000059 | 6/14/2012 | 3 | 352 | 15 | 0.00545 | 86.328 | |

| | | | | | | |
|---------|------------|-----|------|------|---------|------------|
| 0000059 | 6/8/2012 | 10 | 324 | 15 | 0.00545 | 264.87 |
| 0000059 | 5/15/2012 | 10 | 250 | 15.5 | 0.00545 | 211.1875 |
| 0000059 | 5/4/2012 | 25 | 368 | 15.5 | 0.00545 | 777.17 |
| 0000059 | 4/12/2012 | 5 | 368 | 15 | 0.00545 | 150.42 |
| 0000059 | 4/5/2012 | 15 | 334 | 15 | 0.00545 | 409.5675 |
| 0000059 | 3/16/2012 | 40 | 284 | 15.5 | 0.00545 | 959.636 |
| 0000059 | 3/2/2012 | 55 | 222 | 15.5 | 0.00545 | 1031.43975 |
| 0000059 | 2/13/2012 | 5 | 314 | 14.5 | 0.00545 | 124.06925 |
| 0000059 | 2/3/2012 | 5 | 222 | 14.5 | 0.00545 | 87.71775 |
| 0000059 | 1/27/2012 | 40 | 242 | 15.5 | 0.00545 | 817.718 |
| 0000059 | 1/12/2012 | 30 | 284 | 15.5 | 0.00545 | 719.727 |
| 0000059 | 12/16/2011 | 45 | 274 | 15.5 | 0.00545 | 1041.57675 |
| 0000059 | 12/8/2011 | 60 | 324 | 15.5 | 0.00545 | 1642.194 |
| 0000059 | 11/14/2011 | 5 | 480 | 15 | 0.00545 | 196.2 |
| 0000059 | 11/4/2011 | 10 | 398 | 15 | 0.00545 | 325.365 |
| 0000059 | 10/17/2011 | 10 | 368 | 15.5 | 0.00545 | 310.868 |
| 0000059 | 10/6/2011 | 5 | 642 | 15.5 | 0.00545 | 271.16475 |
| 0000059 | 9/15/2011 | 10 | 366 | 15 | 0.00545 | 299.205 |
| 0000059 | 9/6/2011 | 35 | 328 | 15 | 0.00545 | 299.205 |
| 0000059 | 8/16/2011 | 7 | 444 | 15.5 | 0.00545 | 938.49 |
| 0000059 | 8/4/2011 | 2 | 558 | 15.5 | 0.00545 | 262.5483 |
| 0000059 | 7/27/2011 | 8 | 458 | 15.5 | 0.00545 | 94.2741 |
| 0000059 | 7/20/2011 | 2 | 660 | 15.5 | 0.00545 | 309.5164 |
| 0000059 | 6/21/2011 | 15 | 464 | 15 | 0.00545 | 111.507 |
| 0000059 | 6/7/2011 | 15 | 638 | 15 | 0.00545 | 568.98 |
| 0000059 | 5/25/2011 | 115 | 418 | 15.5 | 0.00545 | 782.3475 |
| 0000059 | 5/6/2011 | 30 | 348 | 15.5 | 0.00545 | 4060.71325 |
| 0000059 | 4/25/2011 | 10 | 340 | 15 | 0.00545 | 881.919 |
| 0000059 | 4/12/2011 | 85 | 258 | 15 | 0.00545 | 277.95 |
| 0000059 | 3/25/2011 | 35 | 342 | 15.5 | 0.00545 | 1792.7775 |
| 0000059 | 3/8/2011 | 40 | 282 | 15.5 | 0.00545 | 1011.16575 |
| 0000059 | 2/22/2011 | 5 | 586 | 14 | 0.00545 | 952.878 |
| 0000059 | 2/15/2011 | 10 | 512 | 14 | 0.00545 | 223.559 |
| 0000059 | 1/27/2011 | 15 | 438 | 15.5 | 0.00545 | 390.656 |
| 0000059 | 1/7/2011 | 35 | 534 | 15.5 | 0.00545 | 555.00075 |
| 0000059 | 12/17/2010 | 30 | 356 | 15.5 | 0.00545 | 1578.83775 |
| 0000059 | 12/2/2010 | 15 | 438 | 15.5 | 0.00545 | 902.193 |
| 0000059 | 11/22/2010 | 4 | 674 | 15 | 0.00545 | 555.00075 |
| 0000059 | 11/4/2010 | 10 | 688 | 15 | 0.00545 | 220.398 |
| 0000059 | 10/12/2010 | 5 | 1038 | 15.5 | 0.00545 | 562.44 |
| | | | | | | 438.42525 |

| | | | | | | | |
|---------|------------|----|-----|------|---------|------------|-----------------|
| 0000059 | 5/7/2010 | 15 | 830 | 15.5 | 0.00545 | 1051.71375 | 4Q2009 - 3Q2010 |
| 0000059 | 12/8/2009 | 20 | 632 | 15.5 | 0.00545 | 1067.764 | 3948.3615 |
| 0000059 | 10/15/2009 | 25 | 866 | 15.5 | 0.00545 | 1828.88375 | |

| MPID | Date Sampled | Flow (GPM) | TDS (mg/L) | Days Represented | Conversion Factor | Period Load (kg) | Annual Load (kg) |
|---------|--------------|------------|------------|------------------|-------------------|------------------|-------------------|
| 1070262 | 8/22/2014 | 15 | 230 | 15.5 | 0.00545 | 291.43875 | 4Q 2013 - 3Q 2014 |
| 1070262 | 5/20/2014 | 10 | 362 | 15.5 | 0.00545 | 305.7995 | 761.11975 |
| 1070262 | 3/11/2014 | 5 | 388 | 15.5 | 0.00545 | 163.8815 | |
| 1070262 | 4/1/2013 | 5 | 372 | 15 | 0.00545 | 152.055 | 4Q 2012 - 3Q 2013 |
| 1070262 | 3/22/2013 | 5 | 342 | 15.5 | 0.00545 | 144.45225 | 1538.45325 |
| 1070262 | 3/15/2013 | 5 | 982 | 15.5 | 0.00545 | 414.77225 | |
| 1070262 | 1/2/2013 | 5 | 292 | 15.5 | 0.00545 | 123.3335 | |
| 1070262 | 11/14/2012 | 5 | 292 | 15 | 0.00545 | 119.355 | |
| 1070262 | 11/7/2012 | 5 | 316 | 15 | 0.00545 | 129.165 | |
| 1070262 | 10/9/2012 | 5 | 250 | 15.5 | 0.00545 | 105.59375 | |
| 1070262 | 10/2/2012 | 15 | 276 | 15.5 | 0.00545 | 349.7265 | |
| 1070262 | 7/18/2012 | 70 | 336 | 15.5 | 0.00545 | 1986.852 | 4Q 2011 - 3Q 2012 |
| 1070262 | 7/9/2012 | 15 | 360 | 15.5 | 0.00545 | 456.165 | 17545.93165 |
| 1070262 | 6/15/2012 | 2 | 324 | 15 | 0.00545 | 52.974 | |
| 1070262 | 5/15/2012 | 75 | 334 | 15.5 | 0.00545 | 2116.09875 | |
| 1070262 | 5/7/2012 | 2 | 412 | 15.5 | 0.00545 | 69.6074 | |
| 1070262 | 4/12/2012 | 10 | 398 | 15 | 0.00545 | 325.365 | |
| 1070262 | 4/4/2012 | 10 | 414 | 15 | 0.00545 | 338.445 | |
| 1070262 | 3/16/2012 | 70 | 378 | 15.5 | 0.00545 | 2235.2085 | |
| 1070262 | 3/2/2012 | 50 | 376 | 15.5 | 0.00545 | 1588.13 | |
| 1070262 | 2/13/2012 | 5 | 380 | 14.5 | 0.00545 | 150.1475 | |
| 1070262 | 2/3/2012 | 10 | 354 | 14.5 | 0.00545 | 279.7485 | |
| 1070262 | 1/27/2012 | 50 | 324 | 15.5 | 0.00545 | 1368.495 | |
| 1070262 | 1/12/2012 | 105 | 352 | 15.5 | 0.00545 | 3122.196 | |
| 1070262 | 12/15/2011 | 20 | 328 | 15.5 | 0.00545 | 554.156 | |
| 1070262 | 12/8/2011 | 65 | 308 | 15.5 | 0.00545 | 1691.1895 | |
| 1070262 | 11/14/2011 | 5 | 388 | 15 | 0.00545 | 158.595 | |
| 1070262 | 11/4/2011 | 35 | 310 | 15 | 0.00545 | 886.9875 | |
| 1070262 | 10/18/2011 | 5 | 318 | 15.5 | 0.00545 | 134.31525 | |
| 1070262 | 10/6/2011 | 1 | 370 | 15.5 | 0.00545 | 31.25575 | |
| 1070262 | 9/6/2011 | 20 | 268 | 15 | 0.00545 | 438.18 | 4Q 2010 - 3Q 2011 |

| | | | | | | | |
|---------|------------|-----|------|------|---------|------------|-------------------|
| 1070262 | 8/16/2011 | 1 | 312 | 15.5 | 0.00545 | 26.3562 | 60383.5802 |
| 1070262 | 7/27/2011 | 2 | 440 | 15.5 | 0.00545 | 74.338 | |
| 1070262 | 7/20/2011 | 15 | 512 | 15.5 | 0.00545 | 648.768 | |
| 1070262 | 6/21/2011 | 75 | 354 | 15 | 0.00545 | 2170.4625 | |
| 1070262 | 6/7/2011 | 60 | 820 | 15 | 0.00545 | 4022.1 | |
| 1070262 | 5/25/2011 | 75 | 736 | 15.5 | 0.00545 | 4663.02 | |
| 1070262 | 5/6/2011 | 60 | 568 | 15.5 | 0.00545 | 2878.908 | |
| 1070262 | 4/25/2011 | 90 | 544 | 15 | 0.00545 | 4002.48 | |
| 1070262 | 4/12/2011 | 165 | 496 | 15 | 0.00545 | 6690.42 | |
| 1070262 | 3/25/2011 | 75 | 734 | 15.5 | 0.00545 | 4650.34875 | |
| 1070262 | 3/8/2011 | 60 | 598 | 15.5 | 0.00545 | 3030.963 | |
| 1070262 | 2/22/2011 | 35 | 784 | 14 | 0.00545 | 2093.672 | |
| 1070262 | 2/15/2011 | 30 | 844 | 14 | 0.00545 | 1931.916 | |
| 1070262 | 1/27/2011 | 40 | 854 | 15.5 | 0.00545 | 2885.666 | |
| 1070262 | 1/7/2011 | 25 | 730 | 15.5 | 0.00545 | 1541.66875 | |
| 1070262 | 12/17/2010 | 25 | 636 | 15.5 | 0.00545 | 1343.1525 | |
| 1070262 | 12/2/2010 | 35 | 668 | 15.5 | 0.00545 | 1975.0255 | |
| 1070262 | 11/22/2010 | 20 | 902 | 15 | 0.00545 | 1474.77 | |
| 1070262 | 11/4/2010 | 50 | 960 | 15 | 0.00545 | 3924 | |
| 1070262 | 10/22/2010 | 35 | 1064 | 15.5 | 0.00545 | 3145.849 | |
| 1070262 | 10/12/2010 | 80 | 1002 | 15.5 | 0.00545 | 6771.516 | |
| 1070262 | 9/17/2010 | 45 | 976 | 15 | 0.00545 | 3590.46 | 4Q 2009 - 3Q 2010 |
| 1070262 | 9/7/2010 | 65 | 994 | 15 | 0.00545 | 5281.8675 | 53432.454 |
| 1070262 | 8/23/2010 | 40 | 338 | 15.5 | 0.00545 | 1142.102 | |
| 1070262 | 7/21/2010 | 75 | 888 | 15.5 | 0.00545 | 5626.035 | |
| 1070262 | 6/7/2010 | 35 | 858 | 15 | 0.00545 | 2454.9525 | |
| 1070262 | 5/25/2010 | 15 | 858 | 15.5 | 0.00545 | 1087.19325 | |
| 1070262 | 5/7/2010 | 60 | 644 | 15.5 | 0.00545 | 3264.114 | |
| 1070262 | 4/26/2010 | 50 | 768 | 15 | 0.00545 | 3139.2 | |
| 1070262 | 4/2/2010 | 25 | 760 | 15 | 0.00545 | 1553.25 | |
| 1070262 | 3/22/2010 | 40 | 602 | 15.5 | 0.00545 | 2034.158 | |
| 1070262 | 3/3/2010 | 25 | 738 | 15.5 | 0.00545 | 1558.56375 | |

| | | | | | | |
|---------|------------|----|------|------|---------|-----------|
| 1070262 | 2/12/2010 | 40 | 542 | 14 | 0.00545 | 1654.184 |
| 1070262 | 2/1/2010 | 45 | 504 | 14 | 0.00545 | 1730.484 |
| 1070262 | 1/12/2010 | 50 | 922 | 15.5 | 0.00545 | 3894.2975 |
| 1070262 | 1/5/2010 | 40 | 606 | 15.5 | 0.00545 | 2047.674 |
| 1070262 | 12/23/2009 | 40 | 560 | 15.5 | 0.00545 | 1892.24 |
| 1070262 | 12/8/2009 | 30 | 1024 | 15.5 | 0.00545 | 2595.072 |
| 1070262 | 11/18/2009 | 25 | 962 | 15 | 0.00545 | 1966.0875 |
| 1070262 | 11/4/2009 | 30 | 988 | 15 | 0.00545 | 2423.07 |
| 1070262 | 10/15/2009 | 40 | 876 | 15.5 | 0.00545 | 2960.004 |
| 1070262 | 10/5/2009 | 25 | 728 | 15.5 | 0.00545 | 1537.445 |

| MPID | Date Sampled | Flow (GPM) | TDS (mg/L) | Days Represented | Conversion Factor | Period Load (kg) | Annual Load (kg) |
|---------|--------------|------------|------------|------------------|-------------------|------------------|-------------------|
| 1085587 | 9/23/2014 | 125 | 1084 | 15 | 0.00545 | 11077.125 | 4Q 2013 - 3Q 2014 |
| 1085587 | 9/11/2014 | 100 | 1046 | 15 | 0.00545 | 8551.05 | 204733.7463 |
| 1085587 | 8/22/2014 | 150 | 850 | 15.5 | 0.00545 | 10770.5625 | |
| 1085587 | 8/5/2014 | 100 | 872 | 15.5 | 0.00545 | 7366.22 | |
| 1085587 | 7/22/2014 | 75 | 476 | 15.5 | 0.00545 | 3015.7575 | |
| 1085587 | 7/8/2014 | 100 | 994 | 15.5 | 0.00545 | 8396.815 | |
| 1085587 | 6/19/2014 | 100 | 978 | 15 | 0.00545 | 7995.15 | |
| 1085587 | 6/12/2014 | 125 | 958 | 15 | 0.00545 | 9789.5625 | |
| 1085587 | 5/20/2014 | 100 | 800 | 15.5 | 0.00545 | 6758 | |
| 1085587 | 5/8/2014 | 100 | 990 | 15.5 | 0.00545 | 8363.025 | |
| 1085587 | 4/23/2014 | 125 | 962 | 15 | 0.00545 | 9830.4375 | |
| 1085587 | 4/11/2014 | 125 | 870 | 15 | 0.00545 | 8890.3125 | |
| 1085587 | 3/20/2014 | 125 | 1074 | 15.5 | 0.00545 | 11340.76875 | |
| 1085587 | 3/11/2014 | 150 | 1000 | 15.5 | 0.00545 | 12671.25 | |
| 1085587 | 2/25/2014 | 125 | 806 | 14 | 0.00545 | 7687.225 | |
| 1085587 | 2/11/2014 | 150 | 992 | 14 | 0.00545 | 11353.44 | |
| 1085587 | 1/20/2014 | 175 | 1004 | 15.5 | 0.00545 | 14842.2575 | |
| 1085587 | 1/9/2014 | 150 | 894 | 15.5 | 0.00545 | 11328.0975 | |
| 1085587 | 12/13/2013 | 125 | 540 | 15.5 | 0.00545 | 5702.0625 | |
| 1085587 | 12/3/2013 | 100 | 962 | 15.5 | 0.00545 | 8126.495 | |
| 1085587 | 11/18/2013 | 75 | 1124 | 15 | 0.00545 | 6891.525 | |
| 1085587 | 11/6/2013 | 50 | 1134 | 15 | 0.00545 | 4635.225 | |
| 1085587 | 10/10/2013 | 50 | 1116 | 15.5 | 0.00545 | 4713.705 | |
| 1085587 | 10/3/2013 | 50 | 1098 | 15.5 | 0.00545 | 4637.6775 | |
| 1085587 | 9/12/2013 | 45 | 1082 | 15 | 0.00545 | 3980.4075 | 4Q 2012 - 3Q 2013 |
| 1085587 | 9/5/2013 | 50 | 1064 | 15 | 0.00545 | 4349.1 | 141306.9188 |
| 1085587 | 8/20/2013 | 50 | 1102 | 15.5 | 0.00545 | 4654.5725 | |
| 1085587 | 8/3/2013 | 40 | 1084 | 15.5 | 0.00545 | 3662.836 | |
| 1085587 | 7/17/2013 | 45 | 890 | 15.5 | 0.00545 | 3383.22375 | |
| 1085587 | 7/10/2013 | 50 | 792 | 15.5 | 0.00545 | 3345.21 | |
| 1085587 | 6/21/2013 | 50 | 958 | 15 | 0.00545 | 3915.825 | |

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|---------|------------|-----|------|------|---------|------------|
| 1085587 | 6/14/2013 | 75 | 972 | 15 | 0.00545 | 5959.575 |
| 1085587 | 5/15/2013 | 50 | 1104 | 15.5 | 0.00545 | 4663.02 |
| 1085587 | 5/3/2013 | 50 | 1116 | 15.5 | 0.00545 | 4713.705 |
| 1085587 | 4/8/2013 | 50 | 1112 | 15 | 0.00545 | 4545.3 |
| 1085587 | 4/1/2013 | 75 | 1066 | 15 | 0.00545 | 6535.9125 |
| 1085587 | 3/22/2013 | 20 | 992 | 15.5 | 0.00545 | 1675.984 |
| 1085587 | 3/15/2013 | 75 | 1048 | 15.5 | 0.00545 | 6639.735 |
| 1085587 | 2/12/2013 | 75 | 1396 | 14 | 0.00545 | 7988.61 |
| 1085587 | 2/5/2013 | 100 | 1222 | 14 | 0.00545 | 9323.86 |
| 1085587 | 1/9/2013 | 100 | 912 | 15.5 | 0.00545 | 7704.12 |
| 1085587 | 1/2/2013 | 100 | 678 | 15.5 | 0.00545 | 5727.405 |
| 1085587 | 12/14/2012 | 100 | 1056 | 15.5 | 0.00545 | 8920.56 |
| 1085587 | 12/5/2012 | 50 | 1202 | 15.5 | 0.00545 | 5076.9475 |
| 1085587 | 11/14/2012 | 100 | 1032 | 15 | 0.00545 | 8436.6 |
| 1085587 | 11/7/2012 | 100 | 924 | 15 | 0.00545 | 7553.7 |
| 1085587 | 10/9/2012 | 100 | 1196 | 15.5 | 0.00545 | 10103.21 |
| 1085587 | 10/2/2012 | 100 | 1000 | 15.5 | 0.00545 | 8447.5 |
| 1085587 | 9/14/2012 | 50 | 1382 | 15 | 0.00545 | 5648.925 |
| 1085587 | 9/5/2012 | 25 | 1264 | 15 | 0.00545 | 2583.3 |
| 1085587 | 8/21/2012 | 25 | 1132 | 15.5 | 0.00545 | 2390.6425 |
| 1085587 | 8/9/2012 | 45 | 926 | 15.5 | 0.00545 | 3520.07325 |
| 1085587 | 7/17/2012 | 75 | 850 | 15.5 | 0.00545 | 5385.28125 |
| 1085587 | 7/9/2012 | 105 | 1108 | 15.5 | 0.00545 | 9827.8215 |
| 1085587 | 6/15/2012 | 110 | 1024 | 15 | 0.00545 | 9208.32 |
| 1085587 | 6/8/2012 | 110 | 964 | 15 | 0.00545 | 8668.77 |
| 1085587 | 5/15/2012 | 150 | 822 | 15.5 | 0.00545 | 10415.7675 |
| 1085587 | 5/4/2012 | 180 | 1042 | 15.5 | 0.00545 | 15844.131 |
| 1085587 | 4/12/2012 | 200 | 1174 | 15 | 0.00545 | 19194.9 |
| 1085587 | 4/5/2012 | 250 | 1204 | 15 | 0.00545 | 24606.75 |
| 1085587 | 3/16/2012 | 500 | 1066 | 15.5 | 0.00545 | 45025.175 |
| 1085587 | 3/2/2012 | 210 | 890 | 15.5 | 0.00545 | 15788.3775 |
| 1085587 | 2/13/2012 | 150 | 1162 | 14.5 | 0.00545 | 13774.0575 |

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|---------|------------|-----|------|------|---------|------------------------------|
| 1085587 | 2/3/2012 | 150 | 1070 | 14.5 | 0.00545 | 12683.5125 |
| 1085587 | 1/27/2012 | 105 | 928 | 15.5 | 0.00545 | 8231.244 |
| 1085587 | 1/12/2012 | 160 | 1056 | 15.5 | 0.00545 | 14272.896 |
| 1085587 | 12/15/2011 | 320 | 1122 | 15.5 | 0.00545 | 30329.904 |
| 1085587 | 12/8/2011 | 340 | 792 | 15.5 | 0.00545 | 22747.428 |
| 1085587 | 11/14/2011 | 45 | 1142 | 15 | 0.00545 | 4201.1325 |
| 1085587 | 11/3/2011 | 40 | 1182 | 15 | 0.00545 | 3865.14 |
| 1085587 | 10/17/2011 | 110 | 1342 | 15.5 | 0.00545 | 12470.1995 |
| 1085587 | 10/6/2011 | 70 | 1484 | 15.5 | 0.00545 | 8775.263 |
| 1085587 | 9/15/2011 | 160 | 1122 | 15 | 0.00545 | 14675.76 4Q 2010 - 3Q 2011 |
| 1085587 | 9/6/2011 | 130 | 824 | 15 | 0.00545 | 8757.06 |
| 1085587 | 8/16/2011 | 65 | 1120 | 15.5 | 0.00545 | 6149.78 |
| 1085587 | 8/4/2011 | 20 | 692 | 15.5 | 0.00545 | 1169.134 |
| 1085587 | 7/27/2011 | 55 | 532 | 15.5 | 0.00545 | 2471.7385 |
| 1085587 | 7/20/2011 | 110 | 554 | 15.5 | 0.00545 | 5147.9065 |
| 1085587 | 6/21/2011 | 80 | 512 | 15 | 0.00545 | 3348.48 |
| 1085587 | 6/7/2011 | 70 | 526 | 15 | 0.00545 | 3010.035 |
| 1085587 | 5/6/2011 | 250 | 394 | 15.5 | 0.00545 | 8320.7875 |
| 1085587 | 3/25/2011 | 5 | 412 | 15.5 | 0.00545 | 174.0185 |
| 1085587 | 3/8/2011 | 85 | 346 | 15.5 | 0.00545 | 2484.40975 |
| 1085587 | 2/22/2011 | 100 | 1346 | 14 | 0.00545 | 10269.98 |
| 1085587 | 2/15/2011 | 115 | 1284 | 14 | 0.00545 | 11266.458 |
| 1085587 | 1/27/2011 | 75 | 1338 | 15.5 | 0.00545 | 8477.06625 |
| 1085587 | 1/7/2011 | 135 | 1170 | 15.5 | 0.00545 | 13342.82625 |
| 1085587 | 12/17/2010 | 300 | 912 | 15.5 | 0.00545 | 23112.36 |
| 1085587 | 12/2/2010 | 130 | 962 | 15.5 | 0.00545 | 10564.4435 |
| 1085587 | 11/22/2010 | 45 | 1380 | 15 | 0.00545 | 5076.675 |
| 1085587 | 11/4/2010 | 90 | 1244 | 15 | 0.00545 | 9152.73 |
| 1085587 | 10/22/2010 | 150 | 1358 | 15.5 | 0.00545 | 17207.5575 |
| 1085587 | 10/12/2010 | 250 | 1462 | 15.5 | 0.00545 | 30875.6125 |
| 1085587 | 9/17/2010 | 165 | 1386 | 15 | 0.00545 | 18695.4075 4Q 2009 - 3Q 2010 |
| 1085587 | 9/7/2010 | 180 | 1228 | 15 | 0.00545 | 18070.02 |
| | | | | | | 582632.4135 |

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|---------|------------|-----|------|------|---------|------------|
| 1085587 | 8/23/2010 | 140 | 1012 | 15.5 | 0.00545 | 11968.418 |
| 1085587 | 8/11/2010 | 75 | 1168 | 15.5 | 0.00545 | 7400.01 |
| 1085587 | 7/21/2010 | 250 | 858 | 15.5 | 0.00545 | 18119.8875 |
| 1085587 | 7/14/2010 | 220 | 504 | 15.5 | 0.00545 | 9366.588 |
| 1085587 | 6/14/2010 | 250 | 1206 | 15 | 0.00545 | 24647.625 |
| 1085587 | 6/7/2010 | 200 | 1400 | 15 | 0.00545 | 22890 |
| 1085587 | 5/25/2010 | 150 | 1354 | 15.5 | 0.00545 | 17156.8725 |
| 1085587 | 5/7/2010 | 240 | 604 | 15.5 | 0.00545 | 12245.496 |
| 1085587 | 4/26/2010 | 400 | 1082 | 15 | 0.00545 | 35381.4 |
| 1085587 | 4/2/2010 | 200 | 980 | 15 | 0.00545 | 16023 |
| 1085587 | 3/22/2010 | 200 | 1242 | 15.5 | 0.00545 | 20983.59 |
| 1085587 | 3/3/2010 | 470 | 1542 | 15.5 | 0.00545 | 61222.4115 |
| 1085587 | 2/12/2010 | 350 | 1362 | 14 | 0.00545 | 36372.21 |
| 1085587 | 2/1/2010 | 200 | 1100 | 14 | 0.00545 | 16786 |
| 1085587 | 1/12/2010 | 300 | 1632 | 15.5 | 0.00545 | 41358.96 |
| 1085587 | 1/5/2010 | 300 | 1490 | 15.5 | 0.00545 | 37760.325 |
| 1085587 | 12/28/2009 | 300 | 956 | 15.5 | 0.00545 | 24227.43 |
| 1085587 | 12/8/2009 | 250 | 1344 | 15.5 | 0.00545 | 28383.6 |
| 1085587 | 11/18/2009 | 300 | 774 | 15 | 0.00545 | 18982.35 |
| 1085587 | 11/4/2009 | 300 | 1460 | 15 | 0.00545 | 35806.5 |
| 1085587 | 10/15/2009 | 300 | 1288 | 15.5 | 0.00545 | 32641.14 |
| 1085587 | 10/5/2009 | 150 | 1274 | 15.5 | 0.00545 | 16143.1725 |

| MPID | Date Sampled | Flow (GPM) | TDS (mg/L) | Days Represented | Conversion Factor | Period Load (kg) | Annual Load (kg) |
|---------|--------------|------------|------------|------------------|-------------------|------------------|------------------|
| 1085591 | 9/23/2014 | 15 | 1386 | 15 | 0.00545 | 1699.5825 | 4Q2013 - 3Q2014 |
| 1085591 | 9/11/2014 | 15 | 1302 | 15 | 0.00545 | 1596.5775 | 104147.3745 |
| 1085591 | 8/22/2014 | 40 | 1184 | 15.5 | 0.00545 | 4000.736 | |
| 1085591 | 8/5/2014 | 50 | 1270 | 15.5 | 0.00545 | 5364.1625 | |
| 1085591 | 7/22/2014 | 50 | 1004 | 15.5 | 0.00545 | 4240.645 | |
| 1085591 | 7/8/2014 | 35 | 1336 | 15.5 | 0.00545 | 3950.051 | |
| 1085591 | 6/19/2014 | 40 | 1406 | 15 | 0.00545 | 4597.62 | |
| 1085591 | 6/12/2014 | 50 | 1322 | 15 | 0.00545 | 5403.675 | |
| 1085591 | 5/20/2014 | 50 | 1270 | 15.5 | 0.00545 | 5364.1625 | |
| 1085591 | 5/8/2014 | 40 | 1246 | 15.5 | 0.00545 | 4210.234 | |
| 1085591 | 4/23/2014 | 50 | 1404 | 15 | 0.00545 | 5738.85 | |
| 1085591 | 4/11/2014 | 40 | 1314 | 15 | 0.00545 | 4296.78 | |
| 1085591 | 3/20/2014 | 40 | 1426 | 15.5 | 0.00545 | 4818.454 | |
| 1085591 | 3/11/2014 | 50 | 1500 | 15.5 | 0.00545 | 6335.625 | |
| 1085591 | 2/25/2014 | 50 | 1398 | 14 | 0.00545 | 5333.37 | |
| 1085591 | 2/11/2014 | 50 | 1518 | 14 | 0.00545 | 5791.17 | |
| 1085591 | 1/20/2014 | 50 | 1400 | 15.5 | 0.00545 | 5913.25 | |
| 1085591 | 1/9/2014 | 75 | 1480 | 15.5 | 0.00545 | 9376.725 | |
| 1085591 | 12/13/2013 | 50 | 1290 | 15.5 | 0.00545 | 5448.6375 | |
| 1085591 | 12/3/2013 | 25 | 1256 | 15.5 | 0.00545 | 2652.515 | |
| 1085591 | 11/18/2013 | 20 | 1276 | 15 | 0.00545 | 2086.26 | |
| 1085591 | 11/6/2013 | 10 | 1556 | 15 | 0.00545 | 1272.03 | |
| 1085591 | 10/10/2013 | 15 | 1624 | 15.5 | 0.00545 | 2057.811 | |
| 1085591 | 10/3/2013 | 20 | 1538 | 15.5 | 0.00545 | 2598.451 | |
| 1085591 | 9/12/2013 | 25 | 1452 | 15 | 0.00545 | 2967.525 | 4Q2012 - 3Q2013 |
| 1085591 | 9/5/2013 | 30 | 1446 | 15 | 0.00545 | 3546.315 | 125079.3258 |
| 1085591 | 8/20/2013 | 35 | 1352 | 15.5 | 0.00545 | 3997.357 | |
| 1085591 | 8/3/2013 | 25 | 1466 | 15.5 | 0.00545 | 3096.00875 | |
| 1085591 | 7/18/2013 | 35 | 1484 | 15.5 | 0.00545 | 4387.6315 | |
| 1085591 | 7/11/2013 | 30 | 998 | 15.5 | 0.00545 | 2529.1815 | |
| 1085591 | 6/21/2013 | 30 | 1232 | 15 | 0.00545 | 3021.48 | |

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|---------|------------|-----|--------|------|---------|-------------|
| 1085591 | 6/14/2013 | 35 | 1196 | 15 | 0.00545 | 3422.055 |
| 1085591 | 5/15/2013 | 25 | 1388 | 15.5 | 0.00545 | 2931.2825 |
| 1085591 | 5/3/2013 | 25 | 1430 | 15.5 | 0.00545 | 3019.98125 |
| 1085591 | 4/8/2013 | 25 | 1494 | 15 | 0.00545 | 3053.3625 |
| 1085591 | 4/1/2013 | 50 | 1448 | 15 | 0.00545 | 5918.7 |
| 1085591 | 3/22/2013 | 20 | 1456 | 15.5 | 0.00545 | 2459.912 |
| 1085591 | 3/15/2013 | 50 | 1618 | 15.5 | 0.00545 | 6834.0275 |
| 1085591 | 2/12/2013 | 20 | 1740 | 14 | 0.00545 | 2655.24 |
| 1085591 | 2/5/2013 | 25 | 1830 * | 14 | 0.00545 | 3490.725 |
| 1085591 | 1/9/2013 | 75 | 1714 | 15.5 | 0.00545 | 10859.26125 |
| 1085591 | 1/2/2013 | 75 | 1552 | 15.5 | 0.00545 | 9832.89 |
| 1085591 | 12/14/2012 | 75 | 1442 | 15.5 | 0.00545 | 9135.97125 |
| 1085591 | 12/5/2012 | 50 | 1558 | 15.5 | 0.00545 | 6580.6025 |
| 1085591 | 11/14/2012 | 50 | 1426 | 15 | 0.00545 | 5828.775 |
| 1085591 | 11/7/2012 | 100 | 1248 | 15 | 0.00545 | 10202.4 |
| 1085591 | 10/9/2012 | 100 | 1346 | 15.5 | 0.00545 | 11370.335 |
| 1085591 | 10/2/2012 | 75 | 1090 | 15.5 | 0.00545 | 6905.83125 |
| 1085591 | 9/14/2012 | 25 | 1752 | 15 | 0.00545 | 3580.65 |
| 1085591 | 9/6/2012 | 25 | 1502 | 15 | 0.00545 | 3069.7125 |
| 1085591 | 8/23/2012 | 20 | 1474 | 15.5 | 0.00545 | 2490.323 |
| 1085591 | 8/9/2012 | 15 | 1262 | 15.5 | 0.00545 | 1599.11175 |
| 1085591 | 7/17/2012 | 15 | 1140 | 15.5 | 0.00545 | 1444.5225 |
| 1085591 | 7/9/2012 | 10 | 1560 | 15.5 | 0.00545 | 1317.81 |
| 1085591 | 6/18/2012 | 2 | 1564 | 15 | 0.00545 | 255.714 |
| 1085591 | 6/8/2012 | 10 | 1330 | 15 | 0.00545 | 1087.275 |
| 1085591 | 5/15/2012 | 15 | 1058 | 15.5 | 0.00545 | 1340.61825 |
| 1085591 | 5/4/2012 | 70 | 1290 | 15.5 | 0.00545 | 7628.0925 |
| 1085591 | 4/12/2012 | 70 | 1514 | 15 | 0.00545 | 8663.865 |
| 1085591 | 4/5/2012 | 80 | 1446 | 15 | 0.00545 | 9456.84 |
| 1085591 | 3/16/2012 | 110 | 1490 | 15.5 | 0.00545 | 13845.4525 |
| 1085591 | 3/2/2012 | 125 | 864 | 15.5 | 0.00545 | 9123.3 |
| 1085591 | 2/13/2012 | 30 | 1670 | 14.5 | 0.00545 | 3959.1525 |

3580.65 4Q2011 - 3Q2012

118277.535

| | | | | | | | |
|---------|------------|-----|------|-------|---------|-------------|-----------------|
| 1085591 | 2/3/2012 | 75 | 1772 | 14.5 | 0.00545 | 10502.4225 | |
| 1085591 | 1/27/2012 | 55 | 1352 | 15.5 | 0.00545 | 6281.561 | |
| 1085591 | 1/12/2012 | 75 | 1228 | 15.5 | 0.00545 | 7780.1475 | |
| 1085591 | 12/15/2011 | 60 | 1758 | 15.5 | 0.00545 | 8910.423 | |
| 1085591 | 12/8/2011 | 70 | 1244 | 15.5 | 0.00545 | 7356.083 | |
| 1085591 | 11/14/2011 | 30 | 1514 | 15 | 0.00545 | 3713.085 | |
| 1085591 | 11/3/2011 | 10 | 1530 | 15 | 0.00545 | 1250.775 | |
| 1085591 | 10/17/2011 | 10 | 1610 | 15.5 | 0.00545 | 1360.0475 | |
| 1085591 | 10/6/2011 | 15 | 1784 | 15.5 | 0.00545 | 2260.551 | |
| 1085591 | 9/15/2011 | 20 | 1468 | 15 | 0.00545 | 2400.18 | 4Q2010 - 3Q2011 |
| 1085591 | 9/6/2011 | 60 | 990 | 15 | 0.00545 | 4855.95 | 193325.5986 |
| 1085591 | 8/16/2011 | 35 | 1326 | 15.5 | 0.00545 | 3920.48475 | |
| 1085591 | 8/4/2011 | 85 | 1688 | 15.5 | 0.00545 | 12120.473 | |
| 1085591 | 7/27/2011 | 85 | 1202 | 15.5 | 0.00545 | 8630.81075 | |
| 1085591 | 7/20/2011 | 30 | 1654 | 15.5 | 0.00545 | 4191.6495 | |
| 1085591 | 6/21/2011 | 75 | 364 | 15 | 0.00545 | 2231.775 | |
| 1085591 | 6/7/2011 | 105 | 1774 | 15 | 0.00545 | 15227.5725 | |
| 1085591 | 5/25/2011 | 115 | 1596 | 15.5 | 0.00545 | 15504.5415 | |
| 1085591 | 5/6/2011 | 275 | 1856 | 15.5 | 0.00545 | 43116.04 | |
| 1085591 | 4/25/2011 | 110 | 1936 | 15 | 0.00545 | 17409.48 | |
| 1085591 | 4/12/2011 | 140 | 1518 | 15 | 0.00545 | 17373.51 | |
| 1085591 | 3/25/2011 | 80 | 2026 | 15.5 | 0.00545 | 13691.708 | |
| 1085591 | 3/8/2011 | 75 | 1736 | 15.5 | 0.00545 | 10998.645 | |
| 1085591 | 2/28/2011 | 10 | 1408 | 9.33 | 0.00545 | 715.94688 | |
| 1085591 | 2/23/2011 | 10 | 2102 | 9.33 | 0.00545 | 1068.83547 | |
| 1085591 | 2/15/2011 | 15 | 2018 | 9.33 | 0.00545 | 1539.184095 | |
| 1085591 | 1/27/2011 | 35 | 1892 | 15.5 | 0.00545 | 5593.9345 | |
| 1085591 | 1/7/2011 | 35 | 1878 | 15.5 | 0.00545 | 5552.54175 | |
| 1085591 | 12/20/2010 | 15 | 1552 | 10.33 | 0.00545 | 1310.62908 | |
| 1085591 | 12/17/2010 | 40 | 984 | 10.33 | 0.00545 | 2215.90896 | |
| 1085591 | 12/2/2010 | 15 | 1028 | 10.33 | 0.00545 | 868.12287 | |
| 1085591 | 11/22/2010 | 10 | 1800 | 15 | 0.00545 | 1471.5 | |

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|---------|------------|----|------|-------|---------|----------------------------|
| 1085591 | 11/4/2010 | 10 | 1610 | 15 | 0.00545 | 1316.175 |
| 1085591 | 8/23/2010 | 25 | 1050 | 15.5 | 0.00545 | 2217.46875 4Q2009 - 3Q2010 |
| 1085591 | 7/21/2010 | 50 | 1462 | 15.5 | 0.00545 | 6175.1225 76952.93289 |
| 1085591 | 7/14/2010 | 8 | 1828 | 15.5 | 0.00545 | 1235.3624 |
| 1085591 | 6/14/2010 | 15 | 1064 | 15 | 0.00545 | 1304.73 |
| 1085591 | 6/7/2010 | 25 | 822 | 15 | 0.00545 | 1679.9625 |
| 1085591 | 5/25/2010 | 30 | 850 | 15.5 | 0.00545 | 2154.1125 |
| 1085591 | 5/7/2010 | 25 | 1700 | 15.5 | 0.00545 | 3590.1875 |
| 1085591 | 4/26/2010 | 55 | 738 | 15 | 0.00545 | 3318.2325 |
| 1085591 | 4/2/2010 | 25 | 1864 | 15 | 0.00545 | 3809.55 |
| 1085591 | 3/22/2010 | 40 | 1240 | 15.5 | 0.00545 | 4189.96 |
| 1085591 | 3/3/2010 | 30 | 2224 | 15.5 | 0.00545 | 5636.172 |
| 1085591 | 2/12/2010 | 50 | 1036 | 14 | 0.00545 | 3952.34 |
| 1085591 | 2/1/2010 | 55 | 462 | 14 | 0.00545 | 1938.783 |
| 1085591 | 1/12/2010 | 35 | 848 | 15.5 | 0.00545 | 2507.218 |
| 1085591 | 1/5/2010 | 50 | 2178 | 15.5 | 0.00545 | 9199.3275 |
| 1085591 | 12/28/2009 | 50 | 518 | 10.33 | 0.00545 | 1458.13115 |
| 1085591 | 12/23/2009 | 30 | 850 | 10.33 | 0.00545 | 1435.61175 |
| 1085591 | 12/8/2009 | 35 | 1184 | 10.33 | 0.00545 | 2333.00984 |
| 1085591 | 11/21/2009 | 35 | 1278 | 15 | 0.00545 | 3656.6775 |
| 1085591 | 11/4/2009 | 35 | 1388 | 15 | 0.00545 | 3971.415 |
| 1085591 | 10/15/2009 | 65 | 1268 | 15.5 | 0.00545 | 6962.4295 |
| 1085591 | 10/5/2009 | 30 | 1668 | 15.5 | 0.00545 | 4227.129 |

| MPID | Date Sampled | Flow (GPM) | TDS (mg/L) | Days Represented | Conversion Factor | Period Load (kg) | Annual Load (kg) |
|---------|--------------|------------|------------|------------------|-------------------|------------------|------------------|
| 1085592 | 4/1/2013 | 5 | 318 | 15 | 0.00545 | 129.9825 | 4Q2012 - 3Q2013 |
| 1085592 | 3/19/2013 | 10 | 318 | 15.5 | 0.00545 | 268.6305 | 398.613 |
| 1085592 | 7/18/2012 | 100 | 386 | 15.5 | 0.00545 | 3260.735 | 4Q2011 - 3Q2012 |
| 1085592 | 3/16/2012 | 115 | 400 | 15.5 | 0.00545 | 3885.85 | 12153.2275 |
| 1085592 | 3/2/2012 | 20 | 304 | 15.5 | 0.00545 | 513.608 | |
| 1085592 | 2/3/2012 | 5 | 410 | 14.5 | 0.00545 | 162.00125 | |
| 1085592 | 1/19/2012 | 10 | 420 | 15.5 | 0.00545 | 354.795 | |
| 1085592 | 1/12/2012 | 65 | 450 | 15.5 | 0.00545 | 2470.89375 | |
| 1085592 | 12/8/2011 | 55 | 324 | 15.5 | 0.00545 | 1505.3445 | |
| 1085592 | 6/21/2011 | 10 | 384 | 15 | 0.00545 | 313.92 | 4Q2010 - 3Q2011 |
| 1085592 | 5/25/2011 | 35 | 420 | 15.5 | 0.00545 | 1241.7825 | 7861.11815 |
| 1085592 | 5/6/2011 | 40 | 508 | 15.5 | 0.00545 | 1716.532 | |
| 1085592 | 4/25/2011 | 35 | 366 | 15 | 0.00545 | 1047.2175 | |
| 1085592 | 3/8/2011 | 30 | 350 | 15.5 | 0.00545 | 886.9875 | |
| 1085592 | 2/22/2011 | 1 | 398 | 14 | 0.00545 | 30.3674 | |
| 1085592 | 1/27/2011 | 5 | 422 | 15.5 | 0.00545 | 178.24225 | |
| 1085592 | 1/7/2011 | 20 | 442 | 15.5 | 0.00545 | 746.759 | |
| 1085592 | 12/17/2010 | 25 | 320 | 15.5 | 0.00545 | 675.8 | |
| 1085592 | 12/2/2010 | 15 | 320 | 15.5 | 0.00545 | 405.48 | |
| 1085592 | 11/4/2010 | 20 | 378 | 15 | 0.00545 | 618.03 | |
| 1085592 | 8/23/2010 | 35 | 328 | 15.5 | 0.00545 | 969.773 | 4Q2019 - 3Q2010 |
| 1085592 | 8/11/2010 | 10 | 350 | 15.5 | 0.00545 | 295.6625 | 28470.13488 |
| 1085592 | 7/21/2010 | 65 | 314 | 15.5 | 0.00545 | 1724.13475 | |
| 1085592 | 7/14/2010 | 35 | 374 | 15.5 | 0.00545 | 1105.77775 | |
| 1085592 | 5/25/2010 | 5 | 424 | 15.5 | 0.00545 | 179.087 | |
| 1085592 | 4/26/2010 | 75 | 810 | 15 | 0.00545 | 4966.3125 | |
| 1085592 | 4/2/2010 | 40 | 414 | 15 | 0.00545 | 1353.78 | |
| 1085592 | 3/24/2010 | | 402 | 10.33 | 0.00545 | 22.631997 | |
| 1085592 | 3/22/2010 | 35 | 594 | 10.33 | 0.00545 | 1170.445815 | |
| 1085592 | 3/3/2010 | 30 | 704 | 10.33 | 0.00545 | 1189.02432 | |
| 1085592 | 2/12/2010 | 45 | 572 | 14 | 0.00545 | 1963.962 | |
| 1085592 | 2/1/2010 | 30 | 380 | 14 | 0.00545 | 869.82 | |
| 1085592 | 1/12/2010 | 10 | 362 | 15.5 | 0.00545 | 305.7995 | |
| 1085592 | 1/5/2010 | 55 | 588 | 15.5 | 0.00545 | 2731.9215 | |
| 1085592 | 12/23/2009 | 35 | 340 | 15.5 | 0.00545 | 1005.2525 | |
| 1085592 | 12/8/2009 | 40 | 364 | 15.5 | 0.00545 | 1229.956 | |
| 1085592 | 11/18/2009 | 100 | 392 | 15 | 0.00545 | 3204.6 | |
| 1085592 | 11/4/2009 | 15 | 376 | 15 | 0.00545 | 461.07 | |
| 1085592 | 10/15/2009 | 65 | 370 | 15.5 | 0.00545 | 2031.62375 | |

| | | | | | | |
|---------|-----------|----|-----|------|---------|--------|
| 1085592 | 10/5/2009 | 50 | 400 | 15.5 | 0.00545 | 1689.5 |
|---------|-----------|----|-----|------|---------|--------|

NPDES PERMIT CONDITIONS

**Virginia Department of Mines, Minerals, & Energy
Division of Mined Land Reclamation NPDES Permits**

**DEPARTMENT OF MINES, MINERALS, AND ENERGY
DIVISION OF MINED LAND RECLAMATION**

NPDES PERMIT CONDITIONS

(a) DUTY TO COMPLY

The permittee must comply with all conditions of the permit and all applicable requirements of the CWA. Any permit noncompliance constitutes a violation of the Law and the CWA, except that noncompliance with certain provisions of the permit may constitute a violation of the Law but not the CWA. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

(b) DUTY TO REAPPLY

If the permittee wishes to continue an activity regulated by the permit after the expiration date of the permit, the permittee must apply for and obtain a new permit.

(c) NEED TO HALT OR REDUCE NOT A DEFENSE

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

(d) DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of the permit, which has a reasonable likelihood of adversely affecting human health or the environment.

(e) PROPER OPERATION AND MAINTENANCE

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

(f) PERMIT ACTIONS

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(g) PROPERTY RIGHTS

Permits do not convey any property rights of any sort, or any exclusive privilege.

(h) DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The Director may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the Law. The permittee shall also furnish to the Director upon request, copies of records required to be kept by the permit.

(i) INFORMATION AND ENTRY

The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA and the Law, any substances or parameters at any location.

(j) MONITORING AND RECORDS

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity with monitoring and records conforming to the following:

1. Except for records of monitoring information required by the permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part VI of this regulation), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Director at any time.
2. Records of monitoring information shall include:
 - (i) The date, exact place, and time of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) The date(s) analyses were performed;
 - (iv) The individual(s) who performed the analyses;

- (v) The analytical techniques or methods used; and
 - (vi) The results of such analyses.
3. All discharges from pre-reclamation areas, including discharges of underground mine drainage, shall be sampled two times per calendar month. All discharges from reclamation areas shall be sampled one time per calendar month.

(k) SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Director shall be signed and certified. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation or by both.

(l) REPORTING REQUIREMENTS

Other reporting requirements are as follows:

1. The permittee shall give notice to the Division as soon as possible of any planned physical alterations or additions to the permitted facility.
2. The permittee shall give advance notice to the Division of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.
3. Permits are not transferable to any person except after notice to the Division. The Division may require modification or revocation and reissuance of permits to change the name of the permittee and incorporate such other requirements as may be necessary under the Law or the CWA.
4. Monitoring results shall be reported to the Division on a Discharge Monitoring Report (DMR) within thirty (30) days after the end of the calendar quarter. The DMR will be signed by the company official who is listed as the operator on the application or his designated representative. The representative must be a company employee who is in a position to take responsible action regarding submission of reports, reporting violations, and taking actions to correct violations. If the permittee monitors any pollutant more frequently than required by the permit, using approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted on the DMR. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
5. Twenty-four hour reporting.
 - (i) The permittee shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances.
 - (ii) The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(iii) The following shall be included as information that must be reported within 24 hours under this paragraph.

- A. Any unanticipated bypass that exceeds any effluent limitation in the permit.
- B. Any upset which exceeds any effluent limitation in the permit.
- C. Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit to be reported within 24 hours.

(iv) The Director may waive the written report on a case-by-case basis for non-compliances under this condition if the oral report has been received within 24 hours.

(m) WATER QUALITY MONITORING

The Division may require every owner to furnish such plans, specifications, or other pertinent information as may be necessary to determine the effect of the discharge on the water quality or such information as may be necessary to accomplish the purposes of the CWA. The permittee shall obtain and record such information on the receiving waters as requested by the Division. The information shall be subject to inspection by authorized State and Federal representatives and shall be submitted with such frequency and in such detail as requested by the Division.

(n) MANAGEMENT REQUIREMENTS

1. All discharges authorized by this NPDES permit shall be made in accordance with the terms and conditions of the permit. The Division must be notified at least thirty (30) days prior to all expansions, production increases, or process modifications that will result in new or increased discharge(s) of pollutant. Notification should be by submission of a new NPDES application, or, if such discharge(s) does not violate effluent limitations specified in the permit, by submission to the Division of notice of such new or increased discharge of pollutant(s).
2. The discharge of any pollutant more frequently than, or at a level greater than that identified and authorized by this permit, shall constitute a violation of the terms and conditions of this permit.
3. The discharge of any pollutant(s) from this facility that enters into a water body with an existing and approved Total Maximum Daily Load (TMDL) must be made in compliance with the TMDL and any applicable TMDL implementation plan. If the discharge enters into a water body included on the state's current 303(d) list not having an existing and approved TMDL, the discharge of any pollutant(s) from this facility can not be the cause of the stream's impairment and 303(d) listing.
4. Any permittee or owner proposing a new discharge or new source shall submit an application for a new NPDES permit at least 30 days prior to commencing erection, construction, or expansion or employment of new processes at any facility. Within the 30 day period, the Division may prohibit such commencement until the NPDES permit is issued or revised. In no case, however, shall any discharge from said facility commence prior to issuance of a NPDES permit.

(o) AVAILABILITY OF REPORTS

Except for data determined to be confidential under Section 308 of the Act, all reports prepared in accordance with the terms and conditions of this permit will be available for public inspection at the Division office. As required by the Act, effluent data will not be considered confidential. Knowingly making false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act and in Section 62.1-44.32 of the Code of Virginia.

(p) SPECIAL CONDITIONS

1. This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Section 301(b)(2)(C) and (D), 304 (b)(2), and 307 (a)(2) of the CWA, if the effluent standard or limitations so issued or approved:
 - (i) Contain different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (ii) Control any pollutant not limited in the permit; or
 - (iii) The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act as applicable.
 - (iv) Immediately after EPA's promulgation of applicable standards or limitations, a draft permit incorporating the new requirements shall be sent to the permittee.
2. Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and and/or stored in such a manner so as not to permit discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized herein.

(q) STATE LAW

1. Compliance with this permit during its term constitutes compliance with the Law and Act except for any standard imposed under Section 307 of the Act for a toxic pollutant injurious to human health.
2. State water quality standards contain an antidegradation policy that is applicable to this permit, facility, and discharge(s). Effluent limitations assigned to this permit require the operator to utilize the best available technology to treat all discharges and to protect water quality. As a condition of this permit, the permittee must take appropriate measures to comply with the antidegradation policy.
3. Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other State law or regulation or under authority preserved by Section 510 of the Act.

(r) SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

(s) TOXIC POLLUTANTS

If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in

this permit, this permit shall be revoked and reissued or modified in accordance with the toxic effluent standard or prohibition. Any effluent standard or prohibition established under Section 307(a) for a toxic pollutant injurious to human health is effective and enforceable by the time set forth in the promulgated standard, even absent permit modification.

(t) OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution or any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act or Sections 62.1-44.34(1) through 62.1-44.34(7) of the Law.

(u) OTHER CONDITIONS

Other conditions may be applicable as required by CFR Section 122.41.

NPDES PERMIT DEFINITIONS

- A. The term "acid or ferruginous mine drainage" means mine drainage which, before any treatment, either has a pH of less than 6.0 or a total iron concentration equal to or more than 10 mg/l.
- B. The term "active mine drainage" means the area actively being used or disturbed for the extraction, removal, or recovery of coal from its natural deposits. This excludes areas where reclamation and revegetation has been completed.
- C. The term "alkaline mine drainage" means mine drainage which, before any treatment, has a pH equal to or more than 6.0 and a total iron concentration less than 10 mg/l.
- D. "Application" means the EPA standard national forms for applying for a permit, including any additions or modifications to the forms; or forms approved by EPA for use in approved States, including any approved additions or modifications.
- E. "Approved program or approved State" means a State administered NPDES program which has been approved or authorized by EPA under 40 CFR Part 123.
- F. "Best management practices" (BMP) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs include treatment requirements, operation procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
- G. "Coal preparation plant" means a facility where coal is crushed, screened, sized, cleaned, dried, or otherwise prepared and loaded for transit to a consuming facility. "Coal preparation plant associated areas" means the coal preparation plant yards, immediate access roads, coal refuse piles, and coal storage piles and facilities. "Coal preparation plant water circuit" means all pipes, channels, basins, tanks, and all other structures and equipment that convey, contain, treat, or process any water that is used in coal preparation processes within a coal preparation plant.
- H. The term "commingled discharge" means discharges of drainage from underground workings that are mixed or commingled with surface mine drainage.

- I. “Composite sample” means a combination of individual samples of wastewater taken at 1 hour intervals, for eight (8) hours (or for the duration of discharge, whichever is less), to minimize the effect of variability of the individual samples. Individual samples must be of equal volume. (Example: one (1) liter per hour.)
- J. The term “controlled discharge” means any surface mine drainage that is pumped or siphoned from the active mining area.
- K. “CWA” means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) Public Law 92-500 as amended by Public Law 95-217, and Public Law 95-576, 33 U.S.C. 1251 et seq.
- L. The “daily maximum” discharge means the total mass of a pollutant discharged during the calendar day. Where the pollutant is limited in terms other than mass, the daily maximum shall mean the average concentration or other measurement specified during the calendar day or other specified sampling day.
- M. “Discharge (of a pollutant)” means any addition of any pollutant or combination of pollutants to waters of the United States from any point source; or any addition of any pollutant or combination of pollutants to the waters of the contiguous zone or ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.
- N. “Existing source or existing discharger (in the NPDES program)” means any source which is not a new source or new discharger.
- O. “Effluent limitation” means any restriction imposed by the Director on quantities, discharge rates, and concentrations of pollutants that are discharged from point sources into waters of the United States, the waters of the contiguous zone, or the ocean.
- P. “Effluent limitation guideline” means a regulation published by the Administration under Section 304(b) of the CWA to adopt or revise effluent limitations.
- Q. “Environmental Protection Agency (EPA)” means the United States Environmental Protection Agency.
- R. “Estimate” means to be based on technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters, and batch discharge volumes.
- S. “Grab sample” means an individual sample collected in less than 15 minutes.
- T. “Measured Flow” means any method of liquid volume measurement the accuracy of which has been previously demonstrated in engineering practices, or for which a relationship to absolute volume has been obtained.
- U. “Mine drainage” means any drainage, and any water pumped or siphoned, from an active mining area or a post-mining area. The abbreviation “ml/l” means milliliters per liter.
- V. The “monthly average” discharge means the total mass (and concentration if appropriate) of all daily discharges sampled and/or measured properly during a calendar month divided by the number of daily discharges sampled and/or measured properly during such month.
- W. The “monthly average” temperature means the arithmetic mean of temperature measurements made on an hourly basis, or mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar month, or during the operating month if flows are of shorter duration.

- X. "National Pollutant Discharge Elimination System (NPDES)" means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of CWA. The term includes an approved program.
- Y. "New discharger" means any building, structure, facility, or installation: (A) From which there is or may be a new or additional discharge of pollutants at a site at which on October 18, 1972, it had never discharged pollutants; (B) Which has never received a finally effective NPDES permit for discharges at that site; and (C) Which is not a "new source". This definition includes an indirect discharger, which commences discharging into waters of the United States. It also includes any existing mobile point source, such as an offshore oil drilling rig, seafood processing vessel, or aggregate plant that begins discharging at a location for which it does not have an existing permit.
- Z. "NA" means effluent limitations and monitoring requirements not required.
- AA. "NL" means no limitation on the affected parameters, however monitoring is required.
- BB. "Outfall" means a point source.
- CC. "Permit" means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of 40 CFR Parts 122, 123, and 124.
- DD. "Point source" means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.
- EE. "Pollutant" means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. Section 2011 et seq.)), heat wrecked or discarded equipment, rocks, sand, cellar dirt and industrial, municipal, and agriculture waste discharged into water.
- FF. The term "post-mining area" means: (1) A reclamation area or (2) the underground workings of an underground coal mine after the extraction, removal, or recovery of coal from its natural deposit has ceased and prior to bond release.
- GG. The term "10-year, 24-hour precipitation event" means the maximum 24-hour precipitation event with a probable recurrence interval of once in ten years as defined by the National Weather service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed there from.
- HH. The term "qualifying rainfall event" means the rainfall amounts as defined; active mine areas = 0.2"/24 hours, refuse areas = 2.5"/24 hours, controlled and commingled = 4.4"/24 hour.
- II. The term "reclamation area" means the surface area of a coal mine which has been returned to required contour and on which revegetation (specifically seeding or planting) work has commenced. The term "pre-reclamation area" means the surface area of a coal mine prior to reclamation.
- JJ. The term "settleable solids" is that matter measured by the volumetric method that is determined by the following procedure: (a) fill an imhoff cone to the one-liter mark with a thoroughly mixed sample. Allow to settle undisturbed for 45 minutes. Gently stir along the

inside surface of the cone with a stirring rod. Allow to settle undisturbed for 15 minutes longer. Record the volume of settled material in the cone as milliliters per liter. The method detection limit for coal mining point sources is 0.4 ml/l.

- KK. The terms "treatment facility" and "treatment system" means all structures which contain, convey, and as necessary, physically or chemically treat coal mine drainage, coal preparation process water, surface runoff from disturbed areas, or drainage from coal preparation plant associated areas, which remove pollutants regulated by the Part from such waters. This includes all pipes, channels, ponds, basins, tanks, and all other equipment serving such structures.
- LL. The terms "underground mine drainage or discharge" mean discharges from the underground workings of underground mines until SMCRA bond release.
- MM. The "weekly average" discharge means the total concentration and mass of all daily discharges sampled and/or measured during a calendar week divided by the number of daily discharges sampled and/or measured during such week.
- NN. The term "coal refuse disposal pile" means any coal refuse deposited on the earth and intended as permanent disposal or long term storage (greater than 180 days) of such material, but does not include coal refuse deposited within the active mining area or coal refuse never removed from the active mining area.

D. EVALUATION OF TMDL COMPLIANCE:

The Department will calculate mining waste load quarterly for each TMDL watershed.

Permittee will ensure that waste loads discharged from permit do not exceed mining waste load allocations set forth in the applicable TMDL for the watershed or any individual waste load allocation determined applicable by the Department for this permit and included herein.

Waste load for permit will be calculated from reported monitoring data according to the following formula for each monitoring record:

$$\text{Number of Days represented by sample} \times \text{Flow (gpm)} \times \text{Concentration (mg/L)} \times \text{Conversion Factor (0.00545)} = \text{Kg loading of pollutant}$$

The annual loading for the individual permit will be the summation of all calculated loadings from reported monitoring records associated with the permit for the previous four quarters of data.

For permits within the TMDL watershed that must adhere to aggregate mining waste loads, the waste load from the permit will be summed with mining waste loads from other permitted coal mining discharges within the TMDL watershed and the aggregate mining waste load will be compared to the mining waste load allocation of the approved TMDL report.

If the aggregated annual mining waste load exceeds the mining waste load allocation presented in the TMDL, then the permittee will adhere to the Department's mining waste load reduction actions for TMDL watersheds and any applicable offset.

Applicable Mining Waste Load Offsets

The Department will track approved offset balances for this permit utilizing the Department's TMDL Reporting System. If the permit is required to have a mining waste load offset in order to discharge, then the following requirements will also be applied.

1. Permit compliance will be determined by comparing the rolling annualized aggregate mining waste load to the offset limitations. The permit will not be allowed to exceed the mining waste load offset amount credited to this permit except as described below:
 - a. Provided excess mining waste load is available when the aggregate watershed mining waste load is compared to the TMDL mining waste load allocation, the excess may be applied to the permitted waste load for that particular quarter.
 - b. On the condition of the rolling annualized aggregate waste load exceeding the offset limitation, then the permittee may request that additional available offset credit be applied to the permit.
2. If no excess mining waste load is available and no existing offset credit is available, then the excess mining waste load amount from this permit must have an additional offset. The additional offset must be reviewed and approved by the Department.

There is no new offset required for this permit.

TMDL Reopener Clause

This permit is subject to a TMDL Reopener Clause as described in Part II Section D TMDL Special Conditions (a).